No.



200000285

TO ALL TO WHOM THESE PRESENTS SHALL COME:

ERALB Genetics Corporation

DOCCUS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS OM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN cing a hybrid or different variety therefrom, to the extent provided by the PLANT VARIETY CTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN, FIELD

'GF6150'

In Testimonn Macrest, I have hereunto set my hand and caused the seal of the Plant Buriety Brotection Office to be affixed at the City of Washington, D.C. this second day of May, in the year two thousand two.

Plant Variety Protection Office Agricultural Marketing Service

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following state nents are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

(Instructions and Information	conection burden statement	on rever	se)	1	· · · · · · · · · · · · · · · · · · ·				
1 NAME OF OWNER				2. TEMPORARY DESIGNAT EXPERIMENTAL NAME	ION OR	3. VARIETY NAME			
DEKALB Genetics Corporation				- 1 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		GF6150			
4 ADDRESS (Street and No., or R.F.D. No.,	City State and 7IP Code and Coun	foul			5. TELEPHONE (include are	2 made)	and the second		
	, any, and an and an account and account	·· //			·		FOR OFFICIALUSE ONLY		
•					(815) 758-928	າ ຈາ ດ	PVPO NUMBER		
	amore Road				6. FAX (include area code)	⊈ U	P O O O 2 8 5 1		
DeKalb, I	L 60115				(815) 758-3117	7	· · · · · · · · · · · · · · · · · · ·		
							FILING DATE		
 IF THE OWNER NAMED IS NOT A "PERS ORGANIZATION (corporation, partnership, 	ON", GIVE FORM OF , association, etc.)	8. IF INC	CORPORATE E OF INCOR	ED, GIVE 9. DATE OF INCORPORATION					
Corporation	n	<u> </u>	Delawa	are	June 15, 1988		1/17/00		
10. NAME AND ADDRESS OF OWNER REPI	RESENTATIVE(S) TO SERVE IN THI	S APPLICA	MON. (First)	person listed will rec	ceive all papers)		FILING AND EXAMINATION FEES:		
•				($i \neq 0$ il		E: 745700		
Timothy R. Kain					ael I. Roth		s d		
DEKALB Genetics Corp	oration			Genetics Coamore Road	•		R DATE (0/8/00)		
3100 Sycamore Road DeKalb, Il 60115			•	L 60115			E CERTIFICATION FEE:		
•							E 320.00		
							DATE 4/5/02		
11. TELEPHONE (Include area code)	12. FAX (Include area code)		13. E_MA	E_MAIL			P KIND (Common Name)		
(815) 758-9281	(815) 758-3117			tkain@dek	calb.com		Corn		
15 GENUS AND SPECIES NAME OF CROP			16. FAMI	ILY NAME (Bolanica	u)	17. IS TH	IE VARIETY A FIRST GENERATION		
. <u>Zea m</u>	<u>navs</u>			Gramineae			IID?		
	•		<u> </u>	·					
18. CHECK'APPROPRIATE BOX FOR EACH. (EVERSE)	ATTACHMENT SUBMITTED (Follow	instructions	on	19. DOES THE OF		OF THIS VAI the Plant V	RIETY BE SOLD AS A CLASS OF ariety Protection Act)		
a. X Exhibit A. Origin and Breeding I b. X Exhibit B. Statement of Distinct	•			□ Y	'ES (if 'yes', answer items 20 and 21 below)		X NO (If "no," go to item 22)		
c. X Exhibit C. Objective Description			١ . [20. DOES THE O'	WNER SPECIFY THAT SEED (OF THIS VA	RIETY BE LIMITED AS TO NUMBER		
d. Exhibit D. Additional Description	***			☐ YES ☐ NO					
	intreated seeds or, for tuber propagat			21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?					
repository)	If be depositied and maintained in an		CONC		OUNDATION REGIS		CERTIFIED		
g. X Filing and Examination Fee (\$2, States" (Mail to the Plant Variety	450), made peyable to "Treasurer of i Protection Office)	the United		·					
22. HAS THE VARIETY (INCLUDING ANY HAI FROM THIS VARIETY BEEN SOLD, DISPLOTHER COUNTRIES?	RVESTED MATERIAL) OR A HYBRII OSED OF, TRANSFERRED, OR USE	PRODUC	ED U. S. OR	23. IS THE VARIE PROPERTY R	ETY OR ANY COMPONENT OF RIGHT (PLANT BREEDER'S RIC	THE VARIE SHT OR PA	ETY PROTECTED BY INTELLECTUAL TENT)?		
χ ves U.S. February	2000 🔲 но			☐ YES X NO					
IF YES, YOU MUST PROVIDE THE DATE FOR EACH COUNTRY AND THE CIRCUI	E OF FIRST SALE, DISPOSITION, TE MSTANCES. (Please use space indic	RANSFER, (OR USE rerse.)	IF YES, PLEAS REFERENCE	SE GIVE COUNTRY, DATE OF NUMBER, (Please use space i	FILING OR	ISSUANCE AND ASSIGNED reverse.)		
24. The owners declare that a viable sample of for a tuber propagated variety a tissue cuts	f basic seed of the variety will be furni	ished with a	pplication an	nd will be replecished	d upon request in accordance w	rith such reg	judations as may be applicable, or		
The undersigned owner(s) is(are) the owner and is entitled to protection under the provi	or of this sexually reproduced or tuber	propagated	d plant veriet			iform, and s	table as required in Section 42,		
Owner(s) is(are) informed that false repres		•	•	ies.					
SIGNATURE OF OWNER	AP Vo			SIGNATURE OF	OWNER				
mol	LR.Ko		Ì						
NAME (Please print or type) Timothy F	R. Kain			NAME (Please pri	nt or type)	-			
CAPACITY OR TITLE	DATE 6	1, 1		CAPACITY OR TI	TLE		DATE		
Patent Scientist		6/06	>						
*T-470 (6-98) designed by the Plant Variety Pro	stection Office with WordPerfect 6.0a,	Replaces	STD-470 (03	3-96) which is obsole	ete, (See reverse for inst	ructions and	d information collection burden statement)		

INSTRUCTIONS 200000 Page 2-GF6150

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,450 (\$300 filing fee and \$2,150 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$300 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvp.htm

200000285

ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
 (2) the details of subsequent stages of selection and multiplication;
 - (3) evidence of uniformity and stability; and
 - (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

A hybrid produced from this variety was first sold in the United States - February 2000

23. CONTINUED FROM FRONT (Please give the country, date of filling or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131. '97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213. Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089.

letter. Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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S&T-470 (6-98) designed by the Plant Variety Protection Office with WordPerfect 6,0s. Replaces STD-470 (03-95) which is obsolete.



Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OlFMI, AG Box 1530, Janie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your laboration to prepare and produced in prepared to a collection of information pulses it of Statutes a well OMB non-produced representations.

EXHIBIT A (Amended)

Origin and Breeding History GF6150

GF6150 was selected for improved combining ability, grain quality, seed size and disease resistance.

Summer 1993	The inbred line GF9120* (a proprietary DEKALB Genetics Corporation inbred) was crossed to the inbred line NL054B (a proprietary DEKALB Genetics Corporation inbred) in Union City, TN corn research nursery rows 93:5055 and 93:4964-67.
Winter 1993-94	The S0 seed was grown and self-pollinated (nursery book row number 93:559)
Summer 1994	The S1 seed was grown and self-pollinated (nursery book row number 94:11046)
Summer 1995	The S2 seed was grown ear-to-row and self-pollinated (nursery book row number 95:20767)
Winter 1995-96	The S3 seed was grown ear-to-row and self-pollinated (nursery book row number 95F:431)
Summer 1996	The S4 seed was grown ear-to-row and self-pollinated (nursery book row number 96:35131)
Winter 1996-97	The S5 seed was grown ear-to-row and self-pollinated (nursery book row number 96F:1038) S6 ears were bulked and designated GF6150.

^{* -} The line 'GF9120' is descended from the public line B73.

Statement of Stability and Uniformity

Corn inbred GF6150 was coded in 1996 and has been reproduced by self pollination for the past three generations and judged to be stable. Inbred GF6150 is uniform for all traits observed.

Statement of Variants

GF6150 shows no variants other than what would normally be expected due to environment or that would occur for almost any character during the course of repeated sexual reproduction.

EXHIBIT B

Statement of Distinctness

DEKALB Genetics Corporation believes that GF6150 is most similar to corn inbred NL054B, an inbred developed by DEKALB Genetics Corporation.

GF6150 and NL054B differ most significantly in the following traits:

Qualitative Traits:

Trait	GF6150	NL054B
Cob Color	Red	White
	5 R 3/8	Lighter than 2.5 Y 9/2
Corn Lethal Necrosis	Very Susceptible	Resistant
Northern Leaf Blight (Race 2)	Very Resistant	Shows no susceptibility nor resistance

FORM SD-470-28 (9-1-92)

United States Department of Agriculture, Agricultural Marketing Service Science Division, Plant Variety Protection Office National Agricultural Library Building, Room 500 Beltsville, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY CORN (Zea mays L.)

Name of Applicant(s)		Variety Seed Sc	ource	Variety		cary Designation
DEKALB Genetics Corporation					GF6150	
Address (Street & No., or R.F.D. No., City, State, Zip C	ode and Country	7)		FOR OFFI	ICIAL USE	
3100 Sycamore Road, DeKalb, IL 60115 U.S.A.			-	PVPO Num	aber 2000	0 0285
Place the appropriate number that describes the varietal whole numbers by adding leading zeroes if necessary. Co Traits designated by a '*' are considered necessary for	mpleteness shou	ald be striven for	to esta	blish an	adequate varie	
COLOR CHOICES (Use in conjunction with Munsell color cod 01=Light Green 06=Pale Yellow 02=Medium Green 07=Yellow 03=Dark Green 08=Yellow-Orange 04=Very Dark Green 09=Salmon 05=Green-Yellow 10=Pink-Orange	e to describe a 11=Pink 12=Light Red 13=Cherry Red 14=Red 15=Red & White	16=Pale 17=Purpl 18=Color 19=White	Purple e eless		d #26 in Commer 21=Buff 22=Tan 23=Brown 24=Bronze 25=Variegated 26=Other (Descr	(Describe)
STANDARD INBRED CHOICES (Use the most similar (in backgro Yellow Dent Families: Family Members B14 CM105, A632, B64, B68 B37 B37, B76, H84 B73 N192, A679, B73, NC268 C103 Mo17, Va102, Va35, A682 Oh43 A619, MS71, H99, Va26 WF9 W64A, A554, A654, Pa91	Yellow Co109, ND24 Oh7, I W117, W182BN	Dent (Unrelated): 6, 232 W153R		Swee C13, Iow Popc SG1 Pipe	t Corn: a5125, P39, 213	32 01, HP7211
1. TYPE: (describe intermediate types in Comments secti * 8 1=Sweet 2=Dent 3=Flint 4=Flour 5=Pop 6=Ornam		rn 8=Flint-Dent	2		ed Name MO17	t y a galantina.
2. REGION WHERE DEVELOPED IN THE U.S.A.: * 2 1=Northwest 2=Northcentral 3=Northeast 4=South 6=Southwest 7=Other	east 5=Southce	ntral	Stand 2	ard Seed	Source NCRIPS_	
3. MATURITY (In Region Best Adaptability; show Heat Unisection): DAYS * _ 7 9 1 5 7 9. 0 From emergence to 50 * _ 8 0 1 6 0 4. 7 From emergence to 50 From 10% to 90% pollutions (*) From 50% silk to opt	% of plants in % of plants in en shed	silk pollen	DAYS 0 8 0 7 	2	HEAT UNITS 1 6 0 2. 1 4 8 1	
From 50% silk to har	vest at 25% moi	sture				
	tandard Deviati	on Sample Size			andard Deviatio	-
* 1 9 7.5 cm Plant Height (to tassel tip)	13.6	60	2 2	2. 6	13.282	170
* 0 9 6.5 cm Ear Height (to base of top ear node)	5.5	60	0 8		7.877	170
0 1 1.6 cm Length of Top Ear Internode	2.1	60	0 1	5.0	1.568	170
Average Number of Tillers						
* 1. 0 Average Number of Ears per Stalk	0.0	60		1. 0	0.085	170
4 Anthocyanin of Brace Roots: 1=Absent 2=Fa	int 3=Moderate	4=Dark	1		, .	
Application Variety Data	P	age 1	Stand	ard Inbr	ed Data	

Application	Variety Data	Page	2	Standard Inbred Data					
5. LEAF:		Standard Deviation	Sample Size	-			Sta	ndard Deviation	Sample Siz
* 0 0	8. 6 cm Width of Ear Node Leaf	0.6	60	0	0	9.	0	0.736	170
* 0 7	7. 1 cm Length of Ear Node Leaf	5.8	60	0	6	8.	8	3.079	170
*	5. 8 Number of leaves above top ear	0.0	20			5.	1	0.399	85
2	5. 0 degrees Leaf Angle (measure from 2nd leaf above ear at a	2.0 inthesis to stalk abo	60 we leaf)		3	3.	4	6.075	170
*	0 2 Leaf Color (Munsell code 5 GY 4/8)			0	2	(Mu	nsell	code 5 GY 4/8)	
	8 Leaf Sheath Pubescence(Rate on scale	from 1=none to 9=pea	ch fuzz)	2					
	4 Marginal Waves (Rate on scale from 1=	none to 9=many)		4					
	3 Longitudinal Creases (Rate on scale f	rom 1=none to 9=many	1	2					
6. TASSEL:		Standard Deviation	Sample Size				Sta	ndard Deviation	Sample Size
* 0 4.7	Number of Primary Lateral Branches	0.2	60	0	5.	9		0.663	170
1 5.3	Branch Angle from Central Spike	5.0	60	4	7.	0		8.439	170
* 3 1.0	cm Tassel Length	2.6	60	4	6.	5		5.931	170
5. 2	(from top leaf collar to tassel tip) Pollen Shed (Rate on scale from 0=male ste	rile to 9=heavy shed		6.	0				
0 5	Anther Color (Munsell code 2.5 GY 8/6)			0	5	(Mu	nsell	code 2.5 GY 8/6)	
0 2	Glume Color (Munsell code 5 GY 4/8)			0	2	(Mu	nsell	code 5 GY 4/8)	
1	Bar Glumes (Glume Bands): 1=Absent 2=Prese	nt		1					
	nhusked Data): ilk Color (3 days after emergence) (Munsell	code 2.5 GY 8/6 with	ı 5 R 5/8)	2 5/8)	2	(Mui	nsell	code 2.5 GY 8/6	with 5 R
0 2 F	resh Husk Color (25 days after 50% silking)	(Munsell code 5 GY	1/8)	0	2	(Mui	nsell	code 5 GY 4/8)	
2 1 D	ry Husk Color (65 days after 50% Silking) (Munsell code 2.5 Y 8/	(4)	2	1	(Mur	nsell	code 2.5 Y 8/4)	
* 2 P	osition of Ear at Dry Husk Stage: 1=Upright	2=Horizontal 3=Pende	ent	3					
5 H	usk Tightness (Rate on scale from 1=very lo	ose to 9=very tight)		4					
1 Ht	usk Extension (at harvest): 1=Short (ears e 3=Long (8-10 cm beyond ear t			2					
7b. EAR (H	usked Ear Data):	Standard Deviation	Sample Size				Star	ndard Deviation	Sample Siz
* 1 5	. 3 cm Ear Length	1.1	60	1	8.	4		1.922	80
* 4 1	. 0 mm Ear Diameter at mid-point	3.0	60	3	4.	9		1.676	80
1 2 7.	. 4 gm Ear Weight	10.7	60	1	0	1.	1	24.193	160
* 1	5 Number of Kernel Rows	0.8	60	1	1			0.651	80
	2 Kernel Rows: 1=Indistinct 2=Distinct			2					
	2 Row Alignment: 1=Straight 2=Slightly Cu	rved 3=Spiral		2					
0 7	. 0 cm Shank Length	4.0	60	1	з.	2		2.867	160
	2 Ear Taper: 1=Slight 2=Average 3=Extreme			1					
Application	Variety Data			Star	nda	rd :	Inbred	d Data	
Note: Ilse ch	nart on first page to choose color codes fo	r color traits		L				 ·····	

6

Application Variety Data	Page	3	Standard Inbred Data				
8. KERNEL (Dried):	Standard Deviation	Sample Size				Standard Deviation	Sample Size
1 0.3 mm Kernel Length	0.5	60	1	0.	4	0.771	80
0 7.1 mm Kernel Width	0.1	60	0	8.	5	0.545	80
0 3.7 mm Kernel Thickness	0.2	60	0	4.	4	0.339	80
3 5.8 % Round Kernels (Shape Grade)	7.0	500g	7	7.	0		500g
1 Aleurone Color Pattern: 1=Homozygous 2=Se	gregating		1				
(*) 1 9 Aleurone Color (Munsell code Lighter than	2.5 Y 9/2)	i	1	9	(Mui	sell code Lighter Th	an 2.5 Y 9/2
\star 0 7 Hard Endosperm Color (Munsell code 2.5 Y	8/10)	l	0	7	(Mui	nsell code 2.5 Y 8/10)
* 0 3 Endosperm Type: 1=Sweet (sul) 2=Extra Swe 4=High Amylose Starch 5=Waxy Starch 6=Hi 8=Super Sweet (se) 9=High Oil 10=Other			0	3			
2 5. 1 gm Weight per 100 Kernels (unsized sample) 1.7	400 seeds	2	9.	0	4.053	1700 seeds
9. COB:	Standard Deviation	Sample Size				Standard Devaition	Sample Siz
* 2 4.0 mm Cob Diameter at mid-point	0.3	60	1	8.	2	1.153	80
1 4 Cob Color (Munsell code 5 R 3/8)			1	4	(Mui	sell code 5 R 3/8)	
6 Anthracnose Leaf Blight (Colletotrichum graminicol. Common Rust (Puccinia sorghi) Common Smut (Ustilago maydis) 5 Eyespot (Kabatiella zeae) 8 Goss's Wilt (Clavibacter michiganense spp. nebrask 4 Gray Leaf Spot (Cercospora zeae-maydis) 8 Helminthosporium Leaf Spot (Bipolaris zeicola) Race 8 Northern Leaf Blight (Exserohilum turcicum) Race 2 6 Southern Leaf Blight (Bipolaris maydis) Race 0 Southern Rust (Puccinia polysora) 7 Stewart's Wilt (Erwinia stewartii) Other (Specify) B. Systemic Diseases 2 Corn Lethal Necrosis (MCMV and MDMV) Head Smut (Sphacelotheca reiliana) Maize Chlorotic Dwarf Virus (MCDV) Maize Dwarf Mosaic Virus (MCMV) Maize Dwarf Mosaic Virus (MCMV) Sorghum Downy Mildew of Corn (Peronosclerospora so. Other (Specify) C. Stalk Rots	ense) e 2		88 - 1 - 58 -	Race Race Stra	e 2 e 0		
Anthracnose Stalk Rot (Colletotrichum graminicola) Diplodia Stalk Rot (Stenocarpella maydis) Fusarium Stalk Rot (Fusarium moniliforme) Gibberella Stalk Rot (Gibberella zeae) Other (Specify) D. Ear and Kernel Rots Aspergillus Ear and Kernel Rot (Aspergillus flavus			- - - - - - -				
Diplodia Ear Rot (Stenocarpella maydis) Fusarium Ear and Kernel Rot (Fusarium moniliforme) Gibberella Ear Rot (Gibberella zeae) Other (Specify)			_ _ _ _				
		- 1	ı			Inbred Data	

Application Variety Data	Pa	Page 4		Standard Inbred Data		
11. INSECT RESISTANCE (Rate from 1 (most susceptible) to leave blank if not tested):	9 (most resista	nt);				
Banks Grass Mite (Oligonychus pratensis) Corn Earworm (Helicoverpa zea) Leaf-Feeding Silk Feeding:	Standard Deviation	Sample Size	-	Standard Deviation	Sample Size	
Ear Damage Corn Leaf Aphid (Rhopalosiphum maidis) Corn Sap Beetle (Carpophilus dimidiatus) European Corn Borer (Ostrinia nubilalis) 1 1st Generation (Typically Whorl Leaf Feeding) 2nd Generation (Typically Leaf Sheath-Collar Feeding) Stalk Tunneling:	g)		3 5			
Fall Armyworm (Spodoptera frugiperda) Leaf-Feeding Silk-Feeding: mg larval wt.						
- Maize Weevil (Sitophilus zeamaize) - Northern Rootworm (Diabrotica barberi) - Southern Rootworm (Diabrotica undecimpunctata) - Southwestern Corn Borer (Diatraea grandiosella) - Leaf Feeding - Stalk Tunneling:			-			
						
12. AGRONOMIC TRAITS:						
_ Stay Green (at 65 days after anthesis) (Rate to 9=excellent.) _ 0. 0 % Dropped Ears (at 65 days after anthesis)	on a scale from	n 1=worst	- 0 5.0			
0 0.0 % Pre-anthesis Brittle Snapping			0 0.0			
0 0.0 % Pre-anthesis Root Lodging			0 0.9			
_ 0. 4 % Post-anthesis Root Lodging (at 65 days after	er anthesis)		0 1.0			
4 7 3 3.8 Kg/ha Yield of Inbred Per Se (at 12-13% grain	in moisture)		2 4 0 4.0			
13. MOLECULAR MARKERS: (0=data unavailable; 1=data availab	ole but not supp	olied; 2=data sup	pplied)	_		
1 Isozymes 1 RFLP's _ RAPD's						
REFERENCES:						
Butler, D.R. 1954. A System for the Classification of Corn Inbred Lines. PhD Thesis, Ohio State University. Emerson, R.A., G.W. Beadle, and A.C. Fraser. 1935. A Summary of Linkage Studies in Maize. Cornell A.E.S., Mem. 180. Farr, D.F., G.F. Bills, G.P. Chamuris, A.Y. Rossman. 1989. Fungi on Plant and Plant Products in the United States. The American Phytopathological Society, St. Paul, MN. Inglett, G.E. (Ed.) 1970. Corn: Culture, Processing, Products. Avi Publishing Company, Westport, CT. Jugenheimer, R.W. 1976. Corn: Improvement, Seed Production, and Uses. John Wiley & Sons, New York. McGee, D.C. 1988. Maize Diseases. APS Press, St. Paul, MN. 150 pp. Munsell Color Chart for Plant Tissues. Macbeth. P.O. Box 230. Newburgh, N.Y. 12551-0230 The Mutants of Maize. 1968. Crop Science Society of America. Madison, WI. Shurtleff, M.C. 1980. Compendium of Corn Diseases. APS Press, St. Paul, MN. 105 pp. Sprague, G.F., and J.W. Dudley (Editors). 1988. Corn and Corn Improvement, Third Edition. Agronomy Monograph 18. ASA, CSSA, Madison, WI. Stringfield, G.H. Maize Inbred Lines of Ohio. Ohio A.E.S., Bul. 831. 1959. U.S. Department of Agriculture. 1936, 1937. Yearbook.						
COMMENTS (ag state how heat units were calculated stands	ard inbred seed	source and/or i	where data was col	lected Continu		

COMMENTS (eg. state how heat units were calculated, standard inbred seed source, and/or where data was collected. Continue in Exhibit D):

Heat Unit Calculation: GDU = Daily Max Temp ($\leq 86^{\circ}$ F) + Daily Min Temp ($\geq 50^{\circ}$ F) - 50° F

There are large standard deviations for the following specific traits for 'MO17': degree of leaf angle, tassel branch angle, tassel length, ear weight, and kernel weight. An explanation is requested to what may have contributed to the large variability in these traits.

data collected at 3 test locations over four years for a total sample size of 170 plants measured. Each of the aforementioned characteristics had a wide range of values due to spacial and temporal variation of the test contributing to the large standard deviation. Growing conditions (soil, climate, drought conditions, etc.) contributed significantly to influence the variability of the traits measured.

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1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
DEKALB Genetics Corporation		GF6150
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (include area code)	6. FAX (include area code)
3100 Sycamore Road DeKalb, IL 60115	(815) 758-9281 7. PVPO NUMBER	(815) 758-3117
U.S.A.	<u> </u>	000285
8. Does the applicant own all rights to the variety? Mark an "X" in approp	riate block. If no, please explain.	X YES NO
9. Is the applicant (individual or company) a U.S. national or U.S. based of	ompany?	X YES NO
If no, give name of country 10. Is the applicant the original owner? XYES	NO If no, please answer one of the f	ollowing
لــــا b. If original rights to variety were owned by a company(ies), is(are) the	If no, give name of country	P.
11. Additional explanation on ownership (if needed, use reverse for extra specific process) GF6150 was originated and developed by a big By agreement between DEKALB Genetics Condiscovery, or development are assigned to DE invention, discovery, or development are retain	reeder employed by DEKALB Ger rporation and the breeder, all right KALB Genetics Corporation. No r	s to any invention,
PLEASE NOTE:		· · · · · · · · · · · · · · · · · · ·
Plant variety protection can be afforded only to owners (not licensees) who meet on 1. If the rights to the variety are owned by the original breeder, that person must be which affords similar protection to nationals of the U.S. for the same genus and	a U.S. national, national of a UPOV memb	er country, or national of a country
 If the rights to the variety are owned by the company which employed the origin member country, or owned by nationals of a country which affords similar prote 	nal breeder(s), the company must be U.S. based to nationals of the U.S. for the same g	ed, owned by nationals of a UPOV enus and species.
3. If the applicant is an owner who is not the original owner, both the original own	er and the applicant must meet one of the ab	ove criteria.
The original breeder/owner may be the individual or company who directed final be	reeding. See Section 41(a)(2) of the Plant V	ariety Protection Act for definition.
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